

[4910-13]

### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 25** 

[Docket No.: FAA-2014-0001; Amdt. No. 25-141]

RIN 2120-AK29

Harmonization of Airworthiness Standards—Fire Extinguishers and Class B and F Cargo

**Compartments** 

AGENCY: Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is amending certain airworthiness regulations for transport category airplanes by upgrading fire safety standards for Class B cargo compartments; establishing fire safety standards for a new type of cargo compartment, Class F; and updating related standards for fire extinguishers. This amendment is based on recommendations from the Aviation Rulemaking Advisory Committee (ARAC) and the National Transportation Safety Board (NTSB), and the changes address designs for which airworthiness directives (ADs) have been issued by both the FAA and the French civil aviation authority, Direction Générale de l'Aviation Civile (DGAC).

This amendment eliminates certain regulatory differences between the airworthiness standards of the FAA and the European Aviation Safety Agency (EASA), without affecting current industry design practices. These changes ensure an acceptable level of safety for these types of cargo compartments by standardizing certain requirements and procedures.

DATES: Effective [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For information on where to obtain copies of rulemaking documents and other information related to this final rule, see "How To Obtain Additional Information" in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** For technical questions concerning this action, contact Stephen M. Happenny, Propulsion/Mechanical Systems Branch, ANM-112, Transport Airplane Directorate, Aircraft Certification Service, Federal Aviation Administration, 1601 Lind Ave. S.W., Renton, WA 98055-4056; telephone (425) 227-2147; facsimile (425) 227 1232; e-mail: stephen.happenny@faa.gov.

#### **SUPPLEMENTARY INFORMATION:**

### **Authority for this Rulemaking**

The FAA's authority to issue rules on aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, the FAA is charged with promoting safe flight of civil aircraft in air commerce by prescribing regulations and minimum standards for the design and performance of aircraft that the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it prescribes new safety standards for the design and operation of transport category airplanes.

### I. Overview of Final Rule

The FAA is amending Title 14, Code of Federal Regulations (14 CFR) part 25 as described below. This action harmonizes part 25 requirements for fire extinguishers and cargo compartments with the corresponding requirements in EASA Certification Specifications and Acceptable Means of Compliance for Large Aeroplanes (CS-25).

This amendment defines a new classification of cargo compartment, Class F, with certification standards similar to those for Class C compartments. Class F cargo compartments have no size limit, but must be located on the main deck of the airplane. They must have a liner that meets the fire resistance requirements for Class C compartments, unless the proposed design provides other means to contain a fire and protect critical systems and structure. If a Class F cargo compartment is accessible to crewmembers in flight, at least one readily accessible fire extinguisher must be available for the crew's use. If a proposed Class F cargo compartment incorporates a built-in fire extinguishing system, the applicant must conduct flight tests to demonstrate that there are means to extinguish or control a fire without requiring a crewmember to enter the compartment, and hazardous quantities of extinguishing agent are excluded from any compartment occupied by crew or passengers. The floor panels of Class F cargo compartments must also be self-extinguishing under certain flammability tests in appendix F to part 25, and ceiling and sidewall liner panels must meet the flame penetration resistance test requirements of part III of appendix F.

In addition, this amendment requires Class B cargo compartments to have a defined firefighting access point that will allow a crewmember to fight a fire without stepping into the compartment. This requirement will indirectly limit the size of those compartments.

Finally, this amendment clarifies what the FAA considers "adequate" capacity for built-in fire extinguishing systems.

Manufacturers and modifiers seeking FAA type certification already use the principles of these changes through equivalent level of safety findings and special conditions. Harmonizing FAA and EASA requirements will benefit these applicants by providing a single set of requirements, thereby reducing the cost and complexity of certification and codifying a consistent level of safety.

The changes apply to new airplane designs only, not to existing airplanes. Applicability to derivative airplanes or changed products will be determined according to 14 CFR 21.101, "Designation of applicable regulations."

## II. Background

### A. Statement of the Problem

This rulemaking addresses the problem of fire safety of cargo compartments on passenger airplanes, specifically the need to detect and extinguish cargo compartment fires in a manner that is prompt, reliable, and without hazard to crew or passengers. The EASA enacted standards addressing those issues, and this amendment harmonizes with those standards.

The revised standards stem from actions following a 1987 accident that were discussed in detail in the notice of proposed rulemaking (NPRM), published in the Federal Register July 7, 2014 (79 FR 38266). In summary, a fire occurred in the Class B cargo compartment of a Boeing Model 747-244B airplane operated by South African Airways. It was carrying both passengers and cargo on the main deck, a configuration known as a "combi" and classified under FAA regulations as a Class B cargo compartment. The airplane crashed in the Indian Ocean about 140 miles northeast of Mauritius. All people aboard the airplane perished.

The South African Board of Inquiry reported that 1) there was clear indication that a fire broke out on a right-hand front pallet (one of six) in the main deck cargo hold, and 2) the fire could not be controlled and consequently led to the crash.

An FAA Review Team evaluated the fire protection requirements in Class B cargo compartments at that time and issued the following findings and conclusions:<sup>1</sup>

- 1. Existing rules, policies, and procedures for the certification of Class B cargo or baggage compartments for smoke and fire protection were inadequate.
- 2. The required quantity of fire extinguishing agent and the number of portable fire extinguishers were inadequate.
  - 3. The use of pallets to carry cargo in Class B compartments was no longer acceptable.
  - 4. While entry into the cargo compartment was available, not all cargo was accessible.
  - 5. The reliance on crewmembers to fight a cargo fire had to be discontinued.

This accident led to further investigations and the formation of industry and FAA study groups, including the ARAC and associated working groups, the Cargo Standards Harmonization Working Group (CSHWG) and the Mechanical Systems Harmonization Working Group (MSHWG). The findings and recommendations from these groups underscored the need to limit the size of, and enhance fire detection and suppression in, Class B compartments. They also recommended creating a new classification of cargo compartments on the main deck (Class F cargo compartment) with enhanced fire detection and suppression, and standardization of guidance for testing of fire extinguishing agent concentration.

The ARAC, in a related tasking, recommended harmonization of FAA regulations with EASA standards for cargo compartments and associated fire extinguishers.

<sup>&</sup>lt;sup>1</sup> FAA Review Team report, "Evaluation of Transport Airplane Main Deck Cargo Compartment Fire Protection Certification Procedures," June 1, 1988, available in the docket.

These findings and recommendations, and the FAA's support of the harmonization effort with EASA, formed the basis for this rulemaking.

#### B. Related Actions

In response to the South African Airways accident, the FAA and the DGAC issued airworthiness directives (ADs) that require operational and procedural changes, additional equipment, and enhanced fire detection and suppression systems on applicable large, main-deck combi airplanes. These ADs provide options to the operators of the affected airplanes for achieving an adequate level of safety. The enhanced fire detection and suppression system standards of the ADs require modification of the design of Class B cargo compartments to either comply with the requirements for a Class C cargo compartment or incorporate other specified safeguards.

This amendment and associated guidance material encompass the enhanced standards and options included in the ADs.

## C. National Transportation Safety Board (NTSB) Recommendations

The NTSB investigated the South African 747-244B accident and issued the following safety recommendations:

1. A-88-61. Until fire detection and suppression methods for Class B cargo compartment fires were evaluated and revised, as necessary, the NTSB recommended that the FAA require all cargo carried in Class B cargo compartments of U.S.-registered transport category airplanes be carried in fire resistant containers.

The FAA addressed this recommendation with current AD 93-07-15. The revisions in this amendment to the cargo compartment fire protection requirements and to part 25, appendix F, part I for fire testing requirements also address this recommendation.

 A-88-62. The NTSB recommended that the FAA research the fire detection and suppression methods needed to protect transport category airplanes from catastrophic fires in Class B compartments.

To address this recommendation, the FAA and Europe's Joint Aviation Authorities (JAA), the predecessor to EASA, researched whether Class B cargo compartments might be unsafe. Both authorities concluded that entering the compartment to combat a fire was ineffective for cargo compartments larger than 200 cubic feet in volume and that tests with actual fires should be conducted to more closely establish the maximum safe size. The conclusions of these and other tests, as detailed in the NPRM, were that, when standing at an access point, the person fighting the fire must be able to reach any part of the compartment with the contents of a hand fire extinguisher, and that access should be a function of how the compartment was configured rather than by volume. The revisions to § 25.857(b)(2) in this amendment address these conclusions.

3. A-88-63. The NTSB recommended that the FAA establish fire resistance requirements for the ceiling and sidewall liners in Class B cargo compartments of transport category airplanes that equal or exceed the requirements for Class C as set forth in 14 CFR part 25, appendix F, part III.

The current AD and the revisions to cargo compartment classifications in this amendment address this recommendation.

#### D. Summary of the NPRM

On June 26, 2014, the FAA issued an NPRM to amend §§ 25.851, 25.855, and 25.857. The Federal Register published NPRM Notice No. 14–06, Docket No. FAA-2014-0001, on July 7, 2014 (79 FR 38266). In the NPRM, the FAA proposed to:

- 1. Extend the hand fire extinguisher and built-in fire extinguisher requirements for Class A, B, C, or E cargo or baggage compartments to a new Class F accessible cargo or baggage compartment;
- 2. Revise the requirements for built-in fire extinguishing and suppression systems to clarify that the capacity of the system must be adequate to respond to a fire that could occur in any part of the cargo compartment where cargo or baggage is placed;
- 3. Extend the material standards and design considerations for cargo compartment interiors and the requirement for flight test to demonstrate compliance with § 25.857 regarding the dissipation of extinguishing agent to include the new Class F cargo compartments (with designs that incorporate a built-in fire extinguisher/suppression system); and
- 4. Indirectly limit the size of a Class B cargo compartment by requiring a defined firefighting access point that will allow a crewmember to fight a fire without stepping into the compartment.

The comment period closed on October 6, 2014.

## E. General Overview of Comments

The FAA received eight (8) comments from five (5) commenters representing airplane manufacturers, material manufacturers, and pilots. All of the commenters generally supported the proposed changes; however, some commenters suggested changes, as discussed more fully in the discussion of the final rule below. The Air Line Pilots Association International and SABIC Innovative Plastics concurred with the proposal without comment.

#### III. Discussion of the Final Rule and Public Comments

#### A. New Class F Cargo Compartments

This final rule establishes a new classification, Class F, for cargo or baggage compartments. The design requirements for Class F cargo compartments are set forth in new § 25.857(f). We are also amending §§ 25.851 and 25.855, and appendix F to part 25 to include the new Class F compartment in their applicability.

### 1. "Cargo Compartment Classification," (§ 25.857)

With one modification from what the FAA proposed in the NPRM, § 25.857(f) requires Class F compartments to be located on the main deck; have a separate approved smoke or fire detection system that provides a warning on the flight deck; have a means to exclude smoke, flames, or extinguishing agent from crew or passenger compartments; and have a means to control or extinguish a fire without requiring a crewmember to enter the compartment. This new class of cargo compartments is added to harmonize with EASA and provide a flexible option for cargo compartment certification.<sup>2</sup>

While the FAA originally proposed in the NPRM that Class F cargo compartments be readily accessible in flight, it is not adopting that proposed requirement. One of the purposes of this rulemaking is to harmonize with EASA. As noted in a comment by Boeing Commercial Airplanes (Boeing), EASA's rule does not include that requirement. The FAA concluded that requiring Class F cargo compartments to be readily accessible in flight would go beyond EASA's rule (CS 25.855 and 25.857, equivalent to 14 CFR 25.855 and 25.857) and associated Acceptable Means of Compliance (AMC). It would also be unduly restrictive. For example, the

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<sup>&</sup>lt;sup>2</sup> For example, the requirement that a Class F compartment have a means to control or extinguish a fire without crewmember entry allows flexibility in design. A proposed design may rely on a crewmember to control or extinguish a fire using a hand fire extinguisher without entering the compartment, similar to Class B compartments, or it could employ another means of compliance such as a built-in fire extinguishing/suppression system similar to Class C compartments. The FAA anticipates analyzing a variety of proposed designs for Class F cargo compartments. Alternative processes for approval, such as special conditions and equivalent level of safety findings, will remain available.

FAA currently certifies certain compartments that are not accessible in flight by using the Class C compartment requirements. As explained in the NPRM, a Class F cargo compartment located on the main deck and using a built-in fire suppression system would meet the requirements of a Class C cargo compartment, without accessibility. Therefore, accessibility in flight is an option, but not a requirement, for Class F cargo compartments.

Boeing also commented that requiring Class F cargo compartments to be located on the main deck would not harmonize with EASA's rule. The FAA's requirement is consistent with EASA's certification policy. EASA's AMC states that, "It is not envisaged that lower deck cargo compartments be approved as Class F cargo compartments." The FAA agrees with EASA's position; however, instead of stating this position in guidance material as EASA did, the FAA opted to include it in the regulation. Since this is a harmonization rule, the FAA confirmed with EASA<sup>3</sup> that the FAA rule has the same intent as the corresponding EASA rule and AMC. Therefore, § 25.857(f) requires that Class F cargo compartments be located on the main deck of the airplane.<sup>4</sup>

#### 2. "Fire Extinguishers" (§ 25.851)

As proposed in the NPRM, § 25.851(a)(3), "Hand fire extinguishers," adds Class F cargo compartments that are accessible in flight to the types of cargo compartments that must have hand fire extinguishers. This requirement is consistent with the FAA's prior regulatory practice for accessible cargo compartments and is harmonized with EASA's corresponding regulation.

Embraer commented that the proposed § 25.851(a)(3) would require an applicant to have one hand fire extinguisher in Class F cargo compartments despite any other fire extinguishing

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<sup>&</sup>lt;sup>3</sup> Details of the communication are in the docket.

<sup>&</sup>lt;sup>4</sup> An editorial change from "is located on the main deck" to "must be located on the main deck" is adopted in this rule.

means that may be present, such as a built-in fire extinguishing system or fire containment covers.

This comment overlooks one of the conditions for requiring a hand fire extinguisher.

Only those Class F cargo compartments that are accessible in flight must meet this requirement, so that hand fire extinguishers would not be required for all Class F compartments. Even for compartments that are accessible in flight and have a built-in fire extinguishing system, the presence of a hand fire extinguisher should, in most circumstances, mitigate the additional risk presented by accessibility.<sup>5</sup>

Section 25.851(b)(2), "Built-in fire extinguishers," describes the required capacity of built-in fire extinguishing systems. The FAA revises paragraph (b)(2), as proposed in the NPRM, to clarify what the FAA will accept as "adequate" capacity of built-in fire extinguishing systems. The revised rule states that a built-in fire extinguishing system is adequate if there is sufficient quantity of agent to extinguish the fire or suppress the fire anywhere baggage or cargo is placed within the cargo compartment for the time required to land and evacuate the airplane. The FAA is taking this step to harmonize with EASA and because testing has shown that current methods of compliance are inadequate.

Boeing recommended against this requirement because it is not included in EASA CS 25.851(b)(2). The FAA is adopting this clarification to ensure its enforceability. The FAA coordinated this addition with EASA<sup>6</sup> and ensured that this rule has the same effect as the corresponding EASA rule and AMC.

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<sup>&</sup>lt;sup>5</sup> An exception would be a proposed Class F cargo compartment for which the combination of accessibility and use of a hand fire extinguisher would create additional risk. For example, a proposed design that included a fire-resistant cargo container with a built-in fire suppression unit would likely be safer if the compartment and container were left unopened.

<sup>&</sup>lt;sup>6</sup> Details of the communications are in the docket.

3. "Cargo and Baggage Compartments," (§ 25.855)

Sections 25.855(b) and (c) now include the new Class F compartment in those compartments that are required to have a liner that meets the flame penetration standards required for Class C cargo compartments, unless the proposed design provides other means to contain a fire and protect critical systems and structure.

One material manufacturer, Du Pont Protection Technologies (Du Pont), recommended, in addition to requiring such liners, the enhancement of material standards and design considerations for Class B and F cargo compartment interiors. Specifically, Du Pont suggested requiring the use of fire resistant unit load devices and fire containment covers that meet part 25, appendix F, part III flame penetration resistance test requirements in all Class F cargo compartments in addition to, rather than as an alternative to, requiring cargo compartment liners that meet the same test criteria. While the FAA appreciates the commenter's intent of providing improved fire protection, the proposed additional requirements are unnecessarily burdensome and restrictive, and therefore not adopted.

Section 25.855(h)(3) is revised to extend the requirement for flight tests to those Class F cargo compartments that have built-in fire extinguishers in order to demonstrate compliance with § 25.857.

Also, as a minor correction from what was proposed in the NPRM, this rule changes "or" to "and" to clarify that the flight test requirement in § 25.855(h)(3) applies to both Class C compartments and applicable Class F compartments. The rule now states, "The dissipation of the extinguishing agent in all Class C compartments and, if applicable, in any Class F compartment."

4. Flammability Requirements of Class F Compartment Floor Panels (Appendix F to Part25)

The FAA is including Class F as a compartment that must meet the flammability standards for certain materials used in interior compartments of airplanes. Specifically, Class F floor panels must meet the standards in part I of appendix F to part 25, "Test Criteria and Procedures for Showing Compliance with § 25.853 or § 25.855," paragraphs (a)(1)(ii) and (a)(2)(iii).

### B. Class B Cargo or Baggage Compartments

As proposed in the NPRM, § 25.857(b)(1) now requires sufficient access in flight to enable a crewmember, standing at any one access point and without stepping into a Class B compartment, to extinguish a fire occurring in any part of the compartment using a hand fire extinguisher. As discussed in the NPRM, this requirement will have the effect of limiting the size of Class B compartments.

### C. Differences Between the NPRM and the Final Rule

The rule text as proposed in the NPRM is adopted with one exception. As explained above, Class F cargo or baggage compartments are not required to be readily accessible in flight.

E. Advisory Material

On July 9, 2014, the FAA published and solicited public comments on two proposed advisory circulars (ACs) that describe acceptable means for showing compliance with the NPRM's proposed regulations. The comment period for the proposed ACs closed on October 6, 2014. The FAA received 7 comments from 2 commenters representing airplane and helicopter manufacturers on proposed AC 25.851-1; and 12 comments from 5 commenters representing airplane manufacturers, an airplane equipment manufacturer, and industry standards committees on proposed AC 25.857-1. All of the commenters generally supported the proposed ACs; however, some commenters suggested changes. The FAA added clarification to the guidance in

the ACs but did not change the regulatory requirements as a result of the comments to the proposed ACs. Concurrent with this final rule, the FAA is issuing the following final ACs to provide guidance material for the new regulations adopted by this amendment:

- AC 25.851-1, "Built-in Fire Extinguishing/Suppression Systems in Class C and Class F Cargo Compartments."
- AC 25.857-1, "Class B and F Cargo Compartments."

# IV. Regulatory Notices and Analyses

# A. Regulatory Evaluation

Changes to Federal regulations must undergo several economic analyses. First, Executive Orders 12866 and 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.

Second, the Regulatory Flexibility Act of 1980 (Pub. L. 96-354), as codified in 5 U.S.C. § 603 et seq., requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Pub. L. 96-39), as amended by the Uruguay Round Agreements Act (Pub. L. 103-465), prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, the Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4), as codified in 2 U.S.C. § 1532, requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with

base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this final rule.

Department of Transportation (DOT) Order DOT 2100.5 prescribes policies and procedures for simplification, analysis, and review of regulations. If the expected cost impact is so minimal that a proposed or final rule does not warrant a full evaluation, this order permits that a statement to that effect and the basis for it be included in the preamble if a full regulatory evaluation of the costs and benefits is not prepared. Such a determination has been made for this final rule. The reasoning for this determination follows.

The FAA tasked the ARAC through the Cargo Standards Harmonization Working Group and the Mechanical Systems Harmonization Working Group to review existing part 25 cargo compartments and fire extinguisher regulations and to recommend changes that would eliminate differences between the U.S. and the European airworthiness standards, while maintaining or improving the level of safety in the current regulations. The FAA agrees with the ARAC recommendations to harmonize airworthiness standards for cargo compartments and associated fire extinguishers with the corresponding EASA regulations, which were incorporated into the CS-25 requirements in 2007 and 2009. The final rule eliminates differences between the U.S. and European airworthiness standards.

The final rule applies to new airplane designs only and revises §§ 25.851, "Fire extinguishers;" 25.855, "Cargo or baggage compartments;" 25.857, "Cargo compartment classification;" and part 25, appendix F, part I, "Test Criteria and Procedures for Showing Compliance with § 25.853, or § 25.855." A review of U.S. manufacturers of transport category airplanes revealed that these manufacturers intend to fully comply with the EASA standards (or are already complying). In the NPRM, the FAA stated this rule imposes no more than minimal

cost, and cost-savings could occur. The FAA asked for comment on the cost estimates and received none. The FAA has therefore determined that this final rule will impose at most minimal cost with possible cost-savings and does not warrant a full regulatory evaluation.

The FAA has also determined that this final rule is not a "significant regulatory action" as defined in section 3(f) of Executive Order 12866 and is not "significant" as defined in DOT's Regulatory Policies and Procedures.

### B. Regulatory Flexibility Determination

The Regulatory Flexibility Act (RFA) of 1980 (Pub. L. 96-354) (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation." To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration." The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

However, if an agency determines that a rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify, and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

Small Business Administration size standards specify aircraft manufacturing firms having less than 1,500 employees as small. However, there are no U.S. manufacturers of part 25 airplanes with less than 1,500 employees. Moreover, the final rule has no cost. The FAA made a similar determination for the initial regulatory flexibility analysis, and we received no comments. Therefore, as provided in § 605(b), the head of the FAA certifies that this rulemaking will not result in a significant economic impact on a substantial number of small entities.

### C. International Trade Impact Assessment

The Trade Agreements Act of 1979 (Public Law 96-39) prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this rule and has determined that the rule is in accord with the Trade Agreements Act as the rule uses European standards as the basis for U.S. standards.

### D. Unfunded Mandates Assessment

Title II of the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action." The FAA currently uses an inflation-adjusted value of \$155.0 million in lieu of \$100 million. This rule does not contain such a mandate; therefore, the requirements of Title II of the Act do not apply.

#### E. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. The FAA has determined that there is no new requirement for information collection associated with this final rule.

### F. International Compatibility and Cooperation

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has reviewed the corresponding ICAO Standards and Recommended Practices and has identified no differences with these regulations.

Executive Order (EO) 13609, Promoting International Regulatory Cooperation, [77 FR 26413, May 4, 2012] promotes international regulatory cooperation to meet shared challenges involving health, safety, labor, security, environmental, and other issues and reduce, eliminate, or prevent unnecessary differences in regulatory requirements. The FAA has analyzed this action under the policy and agency responsibilities of Executive Order 13609, Promoting International Regulatory Cooperation. The agency has determined that this action eliminates differences between U.S. aviation standards and those of other civil aviation authorities by creating a single set of certification requirements for transport category airplanes that is acceptable in both the United States and Europe.

#### G. Environmental Analysis

FAA Order 1050.1E identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has

determined this rulemaking action qualifies for the categorical exclusion identified in paragraph 312f of Order 1050.1E and involves no extraordinary circumstances.

#### V. Executive Order Determinations

## A. Executive Order 13132, Federalism

The FAA has analyzed this final rule under the principles and criteria of Executive Order 13132, Federalism. The agency determined that this action will not have a substantial direct effect on the States, or the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, does not have Federalism implications.

B. Executive Order 13211, Regulations that Significantly Affect Energy Supply, Distribution, or Use

The FAA analyzed this rule under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). The agency has determined that it is not be a "significant energy action" under the executive order and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

#### VI. How To Obtain Additional Information

# A. Rulemaking Documents

An electronic copy of a rulemaking document may be obtained by using the Internet —

- 1. Search the Federal eRulemaking Portal (http://www.regulations.gov);
- 2. Visit the FAA's Regulations and Policies Web page at http://www.faa.gov/regulations\_policies/ or
- 3. Access the Government Printing Office's Web page at http://www.gpo.gov/fdsys/.

Copies may also be obtained by sending a request (identified by notice, amendment, or docket number of this rulemaking) to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue S.W., Washington, DC 20591, or by calling (202) 267-9680.

### B. Comments Submitted to the Docket

Comments received may be viewed by going to http://www.regulations.gov and following the online instructions to search the docket number for this action. Anyone is able to search the electronic form of all comments received into any of the FAA's dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.).

## C. Small Business Regulatory Enforcement Fairness Act

The Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires FAA to comply with small entity requests for information or advice about compliance with statutes and regulations within its jurisdiction. A small entity with questions regarding this document, may contact its local FAA official, or the person listed under the FOR FURTHER INFORMATION CONTACT heading at the beginning of the preamble. To find out more about SBREFA on the Internet, visit http://www.faa.gov/regulations\_policies/rulemaking/sbre\_act/.

# List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

#### The Amendment

In consideration of the foregoing, the Federal Aviation Administration amends chapter I of title 14, Code of Federal Regulations as follows:

#### PART 25 – AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES

1. The authority citation for part 25 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

2. Amend § 25.851 by revising paragraphs (a)(3) and (b)(2) to read as follows:

### § 25.851 Fire extinguishers.

- (a) \* \* \*
- (3) At least one readily accessible hand fire extinguisher must be available for use in each Class A or Class B cargo or baggage compartment and in each Class E or Class F cargo or baggage compartment that is accessible to crewmembers in flight.

\* \* \* \* \*

- (b) \* \* \*
- (2) The capacity of each required built-in fire extinguishing system must be adequate for any fire likely to occur in the compartment where used, considering the volume of the compartment and the ventilation rate. The capacity of each system is adequate if there is sufficient quantity of agent to extinguish the fire or suppress the fire anywhere baggage or cargo is placed within the cargo compartment for the duration required to land and evacuate the airplane.
- 3. Amend § 25.855 by revising paragraphs (b), (c), and (h)(3) to read as follows:

### § 25.855 Cargo or baggage compartments.

\* \* \* \* \*

- (b) Each of the following cargo or baggage compartments, as defined in § 25.857, must have a liner that is separate from, but may be attached to, the airplane structure:
  - (1) Any Class B through Class E cargo or baggage compartment, and

- (2) Any Class F cargo or baggage compartment, unless other means of containing a fire and protecting critical systems and structure are provided.
- (c) Ceiling and sidewall liner panels of Class C cargo or baggage compartments, and ceiling and sidewall liner panels in Class F cargo or baggage compartments, if installed to meet the requirements of paragraph (b)(2) of this section, must meet the test requirements of part III of appendix F of this part or other approved equivalent methods.

\* \* \* \* \*

- (h) \* \* \*
- (3) The dissipation of the extinguishing agent in all Class C compartments and, if applicable, in any Class F compartments.

\* \* \* \* \*

- 4. Amend § 25.857 by revising paragraph (b)(1) and adding paragraph (f) to read as follows:
- § 25.857 Cargo compartment classification.

\* \* \* \* \*

- (b) \* \* \*
- (1) There is sufficient access in flight to enable a crewmember, standing at any one access point and without stepping into the compartment, to extinguish a fire occurring in any part of the compartment using a hand fire extinguisher;

\* \* \* \* \*

- (f) Class F. A Class F cargo or baggage compartment must be located on the main deck and is one in which—
- (1) There is a separate approved smoke detector or fire detector system to give warning at the pilot or flight engineer station;

- (2) There are means to extinguish or control a fire without requiring a crewmember to enter the compartment; and
- (3) There are means to exclude hazardous quantities of smoke, flames, or extinguishing agent from any compartment occupied by the crew or passengers.
- 5. Amend appendix F to part 25 by revising the heading for part I and paragraphs (a)(1)(ii) and (a)(2)(iii) under part 1 to read as follows:

#### **APPENDIX F TO PART 25**

Part I—Test Criteria and Procedures for Showing Compliance with § 25.853 or § 25.855

- (a) \* \* \*
- (1)\* \* \*
- (ii) Floor covering, textiles (including draperies and upholstery), seat cushions, padding, decorative and non-decorative coated fabrics, leather, trays and galley furnishings, electrical conduit, air ducting, joint and edge covering, liners of Class B and E cargo or baggage compartments, floor panels of Class B, C, E, or F cargo or baggage compartments, cargo covers and transparencies, molded and thermoformed parts, air ducting joints, and trim strips (decorative and chafing), that are constructed of materials not covered in paragraph (a)(1)(iv) below, must be self-extinguishing when tested vertically in accordance with the applicable portions of part I of this appendix or other approved equivalent means. The average burn length may not exceed 8 inches, and the average flame time after removal of the flame source may not exceed 15 seconds. Drippings from the test specimen may not continue to flame for more than an average of 5 seconds after falling.
- \* \* \* \* \*
  - (2)\*\*\*\*

(iii) A cargo or baggage compartment defined in § 25.857 as Class B, C, E, or F must have floor panels constructed of materials which meet the requirements of paragraph (a)(1)(ii) of part I of this appendix and which are separated from the airplane structure (except for attachments). Such panels must be subjected to the 45 degree angle test. The flame may not penetrate (pass through) the material during application of the flame or subsequent to its removal. The average flame time after removal of the flame source may not exceed 15 seconds, and the average glow time may not exceed 10 seconds.

\* \* \* \* \*

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Michael P. Huerta Administrator

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